

U.S. Military Academy - Ordnance Compound
Blacksmith/Carpenter/Paint Shop
(Cadet Activities Club, Benton Hall)
East of the intersection of Ruger and Howard Roads,
south of building #637
U.S. Military Academy
West Point
Orange County
New York

HABS No. NY-5708-14

44-28

NY

30-0000

Ylu

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, DC 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY
U.S. MILITARY ACADEMY - ORDNANCE COMPOUND BLACKSMITH/CARPENTER/PAINT SHOP
(Ordnance Shops, Machine Shop, Ordnance Barracks, Cadet Activities Club)

LOCATION: East of the intersection of Ruger and Howard Roads,
south of building #637 (HABS No. NY-5708-9); U.S.
Military Academy, West Point, Orange County, New York.

USGS West Point Quadrangle, Universal Transverse Mercator
Coordinates: 18.587010.4582900.

PRESENT OWNER
AND OCCUPANT: U.S. Military Academy, Department of the Army.

PRESENT USE: Cadet Activities Club.

SIGNIFICANCE: The Blacksmith/Carpenter/Paint Shop represents a 1880s
utilitarian addition to the Ordnance Compound.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: Center section ca. 1883-1889; wings ca. 1908 (Grashof).
2. Architect: Unknown; presumably the Quartermaster's Office, U.S.M.A.
3. Original and subsequent owners: U.S. Military Academy, Department of the Army.
4. Builders: Unknown; presumably the Quartermaster's Office, U.S.M.A.
5. Original plans and construction: Williams's Post Facilities Report, 1889, mentions a brick building housing the blacksmith shop, a carpenter's shop and a paint shop. Hodgkins' 1880 map (published in 1883) does not show the building in the Ordnance Compound, therefore placing the date of construction between 1880 and 1889. A 1903 photograph shows that the wings were added after this time. The original plan and interior finish of the building is unknown.

The Annual Reports of 1907 and 1908 mention the condition of the shop and some of the tools in use; see the Supplemental Material for these descriptions.

6. Alterations and additions: Although a 1903 photograph in the Stockbridge Collection (PL 635-d, U.S.M.A. Archives) shows the

building without wings, an expenditure of \$8,757 for the "extension of workshop" indicates that the transverse end wings were added at that time (Annual Report, 1911).

The Annual Report of 1915 states that the ordnance laboratory received steam heat and electric lights and that the machine and carpenter shop received eight Cooper-Hewitt electric lights. Electric lights were also installed "under the sheds."

Alterations in 1939 adaptively transformed the building into the Ordnance Barracks. The plan after this change consisted of two parallel squad rooms in the center section; a mess hall, kitchen and pantry on the west; and a day room, bathroom and toilet on the east. The west door was altered into a window and the eastern most door on the facade was created out of a window at this time.

In 1947 the Signal Corps took over the building and altered the interior arrangement and function of space. The new functions principally concerned the development, viewing and storage of films.

Yet another adaptive use took place in 1957 when the building began to be used for Cadet recreational facilities. The plan, which was completely altered from its 1947 appearance, remains basically unchanged from this period except for a partition wall created for the new kitchen in 1972. Access to the basement was moved from a trap door in the west wing to exterior stairs on the south.

Alterations for which no date is known are the replacement or blocking of doors and windows, and the erection of a concrete loading platform on the facade.

B. Historical Context:

"The Board of Visitors' Report of 1826 recommended that a gun house be erected to protect artillery pieces from exposure to the weather. Subsequently, the Board of Visitors' Report for 1833 stated that a gun house, a laboratory, and a magazine should provide shelter for Ordnance equipment and Ordnance stores. This resulted in the building of the present compound wall and the three original buildings comprising the Ordnance and Artillery Laboratory in 1837. Unfortunately, records are not available that indicate the cost of these buildings; but it is believed that the Act of Congress for the support of the Military Academy approved 2 March 1837 for appropriation of \$8,000.00 was expended for the construction of this laboratory.

"The Guide Book to West Point in July of 1844 states, 'The plan and arrangement of this structure is such as to excite our curiosity. The towers are designed for the storage of various kinds of Ordnance.' During the early years of the compound, the compound yard with its Revolutionary trophies was the predecessor to the Ordnance Museum

founded in 1854 and today known as the West Point Museum.

"Later, the Ordnance and Artillery Laboratory was known as the Ordnance Compound. This took place after the subject of Ordnance was transferred from the Instructor of Artillery to the Instructor of Ordnance and Gunnery on 27 February 1857. Ordnance as a subject, was taught in the Compound from 1837 to 1913 when the Department of Ordnance and Science of Gunnery moved to the newly built East Academic Building. The Ordnance Detachment lived in the barracks within the Compound from 1837 to 1947, when the detachment moved to another location. Upon the movement of the Ordnance troops from the Compound, the flank buildings were converted into apartments for enlisted men and the main building and the little building were used as a photographic laboratory." ("Historical Background on the First Class Compound," Dedication of Benet Hall leaflet, 11 October 1964, U.S.M.A. Archives).

The Department of Ordnance and Gunnery was an essential part of a cadet's training in the mid-nineteenth to early-twentieth century. The history of both the department and its courses was described in the Annual Report of 1897, which is reproduced and found in the Supplemental Material section of HABS No. NY-5708-9. A description of the Ordnance Lab from the 1902 Annual Report outlines its functions at that time: "The routine work at the laboratory by the ordnance detachment includes the care and preservation of all the service and obsolete ordnance, trophy guns, etc., at the post, the preparation of ammunition and blank cartridges for cadet practice and drill, the manufacture of fireworks and such repairs and other work connected with guns, carriages, small arms, ammunition, and ordnance supplies generally as may be necessary in the practical instructions of cadets in their various duties." In the twentieth century the ordnance department lost much of its early significance and its original buildings were gradually converted for other uses. In 1961 the ordnance compound buildings were dedicated as the First Class Club in honor of three former instructors: Brigadier General Stephen Vincent Benet, U.S.M.A. 1849, Major General William Crozier, U.S.M.A. 1876 and Colonel James G. Benton, U.S.M.A. 1842 (See Supplemental Material). For the historical context of the Ordnance Compound within the overall development of the Academy see HABS No. NY-5708, Volume 2: "West Point: An Overview of the History and Physical Development of the United States Military Academy."

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: Architecturally, the Blacksmith/Carpenter/Paint Shop is without merit. Alterations have detracted or obscured the plain, utilitarian nature of the original building. Little original fabric remains.
2. Condition of fabric: Good.

B. Description of Exterior:

1. Overall dimensions: The building measures approximately 133' x 56' with wings projecting about 2' from the 65' long original center section. The one story building has a seventeen bay facade and a partial basement.
2. Foundations: The foundations are presumably brick although the north elevation of the west wing is composed of granite near grade.
3. Walls: All walls are brick laid in five course American bond with the exception of a random laid ashlar stone section on the north elevation of the west wing.
4. Structural system, framing: Walls are load-bearing brick and the unexamined floor and ceiling system is presumably common joist and rafter.
5. Porches: A concrete loading dock was built for the west doorway of the facade.
6. Chimneys: Exhaust vents have replaced all chimneys on the building.
7. Openings:
 - a. Doorways and doors: Three doorways are located on the north elevation: two in the central section and one on the east wing. Of these three, the central and east doorways still retain their original transoms; the west doorway transom has been filled. Each of the doors, with fixed lights on the upper half, appear to be replacements. The three doors on the south elevation with upper fixed lights and blocked-up transoms all appear to be replacements. These latter doorways are located in each of the wings and in the central section.
 - b. Windows: The majority of windows are 6-over-6 lights in wooden sash with concrete lintels and sills; all appear to be replacements. The first period central section has larger, later openings of 30 lights with a pivoting six light middle section. These windows, and a door with flanking windows, have flat soldier-course brick jack arches and sills.

C. Description of the Interior:

1. Floor plans: One large L-shaped room, formed from the west wing and the south part of the central section, comprise most of the plan. This large room serves as a dance floor/ party room. Two smaller rooms (kitchen) form the northern half of the central section while the eastern wing is divided into five rooms: rest-

rooms, lounge area, pool room and television room.

2. Interior finish: All interior finishes are modern.
3. Openings: All interior openings are modern.
4. Decorative features and trim: No original features remain.
5. Hardware: No original features remain.
6. Mechanical equipment: There is no original nor later equipment of interest.

D. Site:

1. General setting and orientation: The Ordnance Compound is on the north face of a hill facing the Hudson River. The Blacksmith/Carpenter/Paint Shop is a detached part of the earlier structures which surround it. The building faces north toward the Barracks (HABS No. NY-5708-9). A driveway runs to the north of the building while a large concrete area for picnic tables has been created immediately to the south. Howard Road passes just north of the whole compound. Across the road to the north is the Ticket Office (U.S.M.A. No. 639) by Paul Cret (originally the Applied Instruction Building, 1937). East of the building the ground rises to an intermediate plateau containing the amphitheater and then rises further to the Plain where the January 1943 Monument, the principal U.S.M.A. flagpole and the Battle Monument are located. This area to the east was also known as Execution Hollow, which according to historical accounts, was an execution site during the Revolutionary War. It was filled-in early in the twentieth century. The Ordnance Compound is on the northwest edge of the Academic Area identified in the "Historical Overview" by Lange.

PART III. SOURCES OF INFORMATION

- A. Architectural Drawings: Original drawings are in the U.S. Military Academy Special Collections and at the National Archives in Washington, D.C. (Record Group 77, Drawer 32, Sheets 18 and 19. Records of the Office of the Chief Engineer, Cartographic and Architectural Branch). Subsequent alteration drawings are in the Facilities Engineer's Office, Directorate of Engineering and Housing, U.S.M.A.
- B. Early View: Early photographs can be found in the U.S. Military Academy Archives and Special Collections. Some of these are reproduced in the Grashof and Lange volumes of this project.
- C. Bibliography:
 1. Primary and unpublished sources: Records, U.S. Military Academy Archives and Special Collections. See bibliographic essay

in the Lange volume of this project for a listing of record groups.

2. Secondary and published sources:

Annual Reports, U.S. Military Academy.

Boynton, Edward C. History of West Point and Its Military Importance During the American Revolution and the Origin and Progress of the United States Military Academy. New York: Van Nostrand, 1863.

Grashof, Bethanie C. "Building Analysis and Preservation Guidelines for Category I and Selected Category II Buildings at the United States Military Academy, West Point, New York," Historic American Buildings Survey, 1983. HABS No. NY-5708.

Lange, Robie S. "West Point: An Overview of the History and Physical Development of the United States Military Academy," Historic American Buildings Survey, 1983. HABS No. NY-5708.

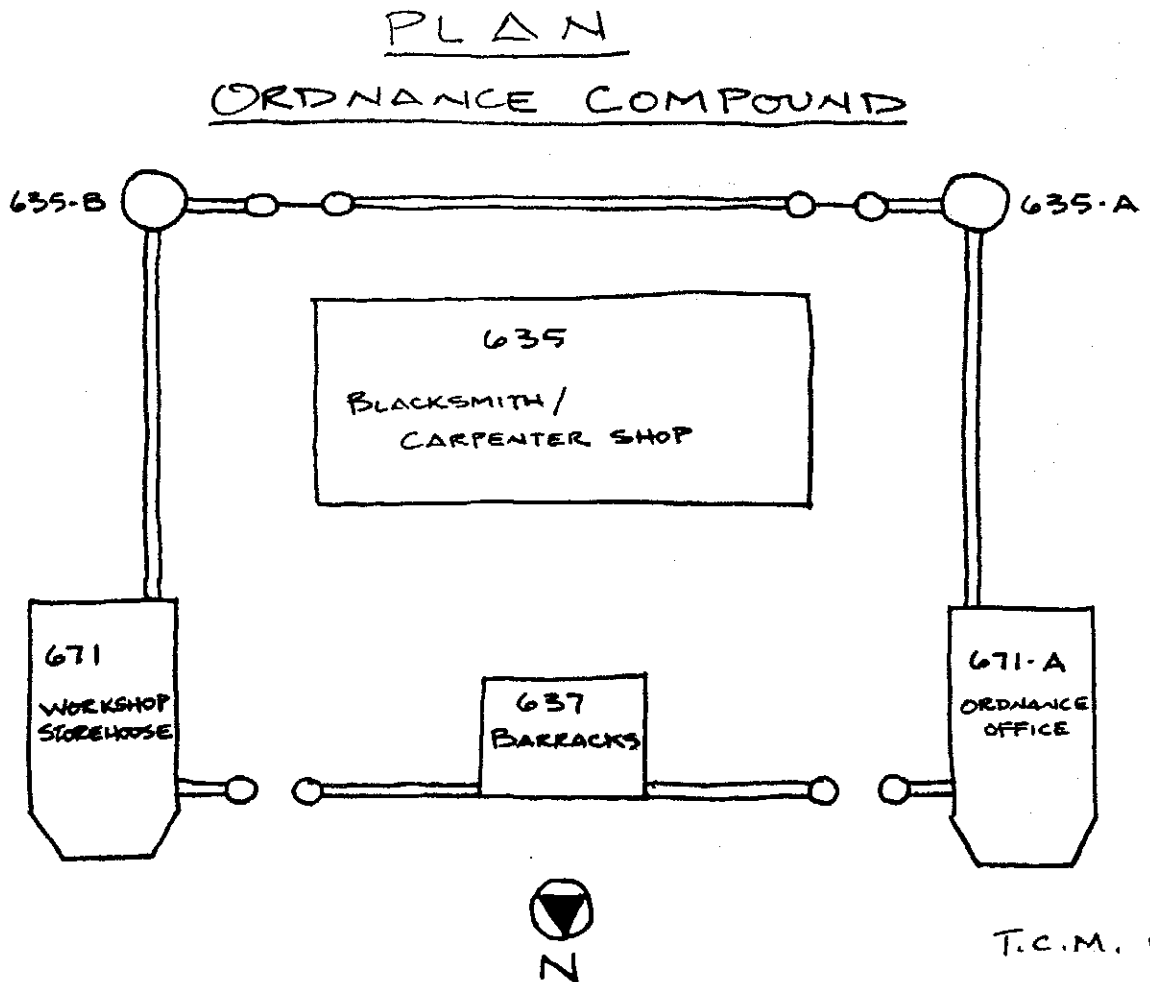
D. Likely Sources Not Yet Investigated: National Archives, Washington, D.C.

E. Supplemental Material:

1. Sketch plan of Ordnance Compound.
2. Description of the "Machine Shop" from the Annual Report of 1907, Appendix J, pp. 78-79, U.S. Military Academy Archives.
3. Description of Machine Tools from Annual Report of 1908, Appendix L, pp. 75-76, U.S. Military Academy Archives.

E. Supplemental Material

1. Sketch Plan of Ordnance Compound.



T.C.M. 1984

(NOT TO SCALE)

E. Supplemental Material

2. Annual Report, 1907, Appendix J, pp. 78-79.

ORDNANCE LABORATORY

"The machine shop at the laboratory has been improved by the addition of tools as follows: One 24-inch vertical drill press; one 14-inch tool-grinder machine, and one grinding attachment for lathe.

"The blacksmith forge has been removed from the shop proper and placed by itself in an extension of the shop, where the dust and dirt insident to its use will not affect the machine tools in the shop proper.

"Under the yearly appropriation of \$500 for the purchase of tools and equipment for the machine shop to be established for cadets in the new academic building, shafting and hangers have been purchased and two machine tools. The appropriation will permit the collection of an excellent equipment of tools for installation when the building is finished."

E. Supplemental Material

3. Annual Report, 1908, Appendix L, pp. 75-76.

ORDNANCE LABORATORY

"The following machine tools were added during the past year to the equipment of the shops at the ordnance laboratory:

One 12-inch motor head speed lathe with 69-inch bed.
One motor-driven combination saw table.
One 36-inch band saw, motor driven.

"These represent the most advanced types of machine tools and are suitable both for the current work of the shops and for cadet instruction in the use of wood and metal working machinery.

"The building containing the machine, carpenter, and paint shops at the ordnance laboratory is now too small to satisfactorily accomodate the work being done therein. While the machine-shop equipment is far from complete, the floor space is so fully occupied that no additional machine tools can be added. Due to its location in the center of the general inclosure, it is believed that the shop building should not be enlarged on its present site.

"It is recommended that steps be taken to construct a larger and better arranged shop building along one of the sides of the general inclosure and that the present shop building be then torn down.

"The storage facilities at the ordnance laboratory are inadequate and otherwise insatisfactory. They comprise one small building, the east, in good condition; one small building, the north, in a dangerous tumble-down condition, and a number of open sheds. It is recommended that the building in the dangerous condition be torn down and replaced by a suitable storehouse."

PART IV. PROJECT INFORMATION

This documentation is part of a multi-year project sponsored by the National Park Service and the United States Military Academy, explained in the United States Military Academy, HABS No. NY-5708, Volume 1, "Methodology," This written documentation was prepared by Travis C. McDonald, Jr., architectural historian, in 1982-1985 based on fieldwork conducted in 1982.